MIFIuFocus May 11, 2006 Influenza Surveillance

Michigan Disease Surveillance System: Flu-like illness activity for the most recent reporting week, as reported in MDSS, decreased further from the previous week. This level is substantially lower than those seen during the time of peak activity and is roughly comparable to the level seen in the first weeks of the influenza season. The current reported flu-like illness activity is also similar to that seen from the same period in 2005.

During the 2005-2006 influenza season, peak activity in MDSS was seen between the week ending February 4 and the week ending April 1. The top three weeks for the season were the weeks ending April 1 (18,139 reports), February 18 (17,607 reports), and February 4 (16,214 reports). During the 2004-2005 influenza season, peak flu-like illness activity was seen between the week ending January 29 and the week ending March 12. The top three weeks of flu-like illness activity were the weeks ending February 12 (36,127 reports), February 19 (32,780 reports), and February 5 (26,963). Based on MDSS information, the current influenza season appears to have been slightly longer, temporally similar, and much less severe than the previous.

Emergency Department Surveillance: Emergency department visits due to constitutional complaints slightly increased over the previous week. However, the level of constitutional complaints is still comparable to the previous year at this time and overall baseline of activity. Emergency department visits due to respiratory complaints continue to decline and the level is now lower than that seen last year at this time. Over the past week, no statewide alerts were generated for either emergency department indicator.

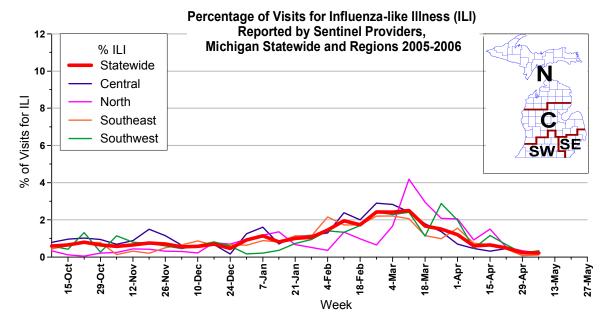
During the 2005-2006 influenza season, emergency department visits due to constitutional complaints peaked in late February at roughly 10% of all visits. Emergency department visits due to respiratory complaints peaked twice – in late October at less than 14% of all visits and again in late February at over 14% of all visits. During the 2004-2005 influenza season, constitutional and respiratory visits peaked in midto late February at roughly 15% and 16% of all visits, respectively. Compared to the previous year, emergency department visits due to constitutional and respiratory complaints indicated flu activity peaked slightly later, was slightly longer in length, and was lower during the current season.

Over-the-Counter Product Surveillance: Sales of all flu-related over-the-counter products show a continued decrease in flu-like illness activity. In particular, dramatic decreases continue to be seen in sales of chest rub, adult cold relief, and thermometer sales. All other indicators were roughly stable or slightly decreased. Compared to the same period last year, sales of antifever medication, chest rubs, and thermometers are slightly increased, while the remaining indicators are the same or decreased.

Over-the-counter product sales are more variable over the course of the year than either MDSS or emergency department surveillance. Overall, however, over-the-counter product surveillance was consistent with the other indicators in suggesting peak activity in flu-like illness activity in February 2006 that was significantly lower than that seen from the previous year.

Sentinel Surveillance (as of May 11, 2006): During the week ending May 6, 2006, the proportion of visits due to influenza-like illness (ILI) remained unchanged from last week at 0.2% of all visits. Low levels of ILI activity were reported across the state; the percentage of visits due to ILI by region was 0.3%, Central; 0.2%, North; 0.1%, Southwest; and 0.3%, Southeast.

The weekly percentage of visits to sentinel physicians due to influenza-like illness was less than 1% of all visits from the beginning of the 2005-2006 influenza season in October, 2005 until the week ending December 31, 2005. In the first week of 2006, the percentage of visits due to ILI reached 1.1%, gradually increasing over the next eight weeks until peak activity of 2.5% was reached during the week ending February 25, 2006. Influenza-like illness activity remained at the peak of 2.5% for another two weeks, then dropped to less than 2% of all visits in the week ending March 18, 2006 and returned to less than 1% of all visits in the week ending April 8, 2006, remaining at that level to date.



Laboratory Surveillance (as of May 11, 2006): The MDCH laboratory has confirmed 137 influenza cases in Michigan, of which 131 were influenza A (H3N2) and 6 were influenza B. No additional positives were reported this week. Data from influenza sentinel laboratories is not available after April.

The MDCH laboratory confirmed 137 cases of influenza this year; 131 were influenza A (H3N2) and 6 were influenza B. The lab received 359 samples for respiratory virus culture from September 2005 through May 11, 2006. Thirty-eight percent of all samples submitted to the MDCH lab for respiratory viral culture were positive for influenza. In the same period last season, the lab received 434 samples for respiratory virus culture and confirmed 185 cases of influenza including 124 influenza A and 61 influenza B. Forty two percent of all samples submitted in the 2004-2005 season for respiratory viral culture were positive for influenza.

Influenza-Associated Pediatric Mortality (as of May 11, 2006): To date, MDCH is reporting one influenza-associated death in region 2S. One other possible report remains under investigation. CDC has received reports of 28 influenza-associated deaths during the current influenza season since October 2, 2005.

**Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection for the 2005-2006 influenza season. This includes not only death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to www.michigan.gov/documents/fluletter 107562 7.pdf for the complete protocol. It is important to immediately call of fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Setting Outbreaks (as of May 11, 2006): No reports were received during the past reporting week.

A total of two congregate setting outbreaks have been reported to MDCH this season; one in Southwest Michigan in late February and one in Southeast Michigan in late March. Both outbreaks were MDCH laboratory confirmed as due to influenza A (H3N2).

National: Week 17 (April 23 – April 29, 2006), influenza activity continued to decline in the United States. The proportion of patient visits to sentinel providers for influenza-like illness (ILI) was below the national baseline. The proportion of deaths attributed to pneumonia and influenza was below the baseline level. Three states reported regional influenza activity; 4 state and the District of Columbia reported local influenza activity; 38 states, New York City, and Perto Rico reported sporadic influenza activity; and five states reported no activity.

International: (WHO, May 5) During weeks 14-16 overall influenza activity declined. In most parts of the world activity was reported as sporadic for week 16.

MDCH reported NO ACTIVITY to the CDC for this past week ending 5/06/2006

End of Seasonal Report

Avian Influenza Activity:

WHO Pandemic Phase 3: Human infection(s) with a new subtype, but no human-to-human spread

Table 1. H5N1 influenza-avian (Poultry outbreaks April 27): downloaded 5/11/2006 http://www.oie.int/downld/AVIAN%20INFLUENZA/Graph%20HPAI/graphs%20HPAI%2027_04_2006.pdf

